Contents lists available at SciVerse ScienceDirect

## **Electoral Studies**

journal homepage: www.elsevier.com/locate/electstud

## The personal vote and economic reform

### Tanya Bagashka\*

University of Houston, 447 Philip G. Hoffman Hall, Houston, TX 77204-3011, USA

#### ARTICLE INFO

Article history: Received 13 November 2010 Received in revised form 11 August 2011 Accepted 2 April 2012

Keywords: Electoral systems Personal vote Economic reform Post-communist transition

#### ABSTRACT

Do electoral rules affect the progress of economic reforms? The students of economic reform have examined the effects of inter-party competition, partly shaped by electoral rules, on economic reform, but have neglected the more direct effects of electoral rules, namely the extent to which they encourage the personal vote. More broadly, studies of the effect of electoral rules on economic policy have relied on the simplistic SMD/PR distinction and have neglected features of electoral institutions that affect the level of intra-party competition. Building on the personal vote literature, we argue that electoral institutions that encourage the personal vote are not conducive to reform progress. We provide the first systematic multivariate cross-country test of the implications of the personal vote literature for economic reform in the context of the post-communist countries from 1990 to 2006. We find that, in line with our theory, countries where electoral rules encourage the personal vote are less likely to reform.

© 2012 Elsevier Ltd. All rights reserved.

#### 1. Introduction

In the post-communist and many developing countries, the transition to democracy occurred in tandem with radical economic reform or transition from a centrally planned to a market economy. The simultaneous transition begs the questions: Why have some new democracies implemented reforms more quickly and successfully than others? Has the choice of political institutions affected the progress of economic reform? Here we focus on the effects of electoral rules. Electoral systems affect two dimensions of political competition: inter-party and intra-party, both of which have implications for the success of economic reform. The inter-party dimension juxtaposes majoritarian and proportional systems. More proportional rules are associated with coalition governments, a higher number of effective parties, and greater political fragmentation, which are generally considered obstacles to successful reforms. The intra-party dimension juxtaposes candidate-centered party-centered systems. In candidate-centered and

systems, where access to the ballot is not controlled by party leaders or where voters can express a preference among co-partisans, candidates have an incentive to build a personal reputation. Building on the personal vote literature, we argue that electoral institutions that encourage the personal vote are not conducive to reform progress. Electoral systems that motivate legislators to build a personal vote are ill-suited to overcoming the collective action problems that lead to the under-provision of public goods. Broad economic reform is usually a public good and is more likely to succeed in systems where party leaders have significant sanctions over party members, such as control over ballot access or campaign finance for candidates. Because the success of party leaders depends on that of the party as a whole, party leaders have the incentive to provide public goods to their constituencies.

The students of economic reform have examined the effects of political fragmentation on economic reform, but have neglected the more direct effects of electoral rules, namely the extent to which they encourage particularist policies (Alesina and Drazen, 1991; Franzese, 2002, 2007; Haggard and Kauffman, 1995; Hallerberg and Basinger, 1998; Henisz and Mansfield, 2006; Keefer and Stasavage, 2003; Mansfield et al., 2007; Treisman, 2000;





<sup>\*</sup> Tel.: +1 713 743 9657; fax: +1 713 743 3927. *E-mail address:* tbagashka@uh.edu.

<sup>0261-3794/\$ –</sup> see front matter  $\odot$  2012 Elsevier Ltd. All rights reserved. doi:10.1016/j.electstud.2012.04.001

Tsebelis, 1995). More broadly, studies of the effect of electoral rules on economic policy have relied on the simplistic SMD/PR distinction and have neglected other features of electoral institutions (Grilli et al., 1991; Milesi-Ferretti et al., 2000; Persson and Tabellini, 1999, 2000; Stein et al., 1999). Electoral system features beyond the SMD/PR distinction such as ballot access, for example, significantly affect the level of intra-party competition in a given country. An open-list proportional representation system where parties and individuals can nominate candidates like the Estonian one generates personalist incentives comparable to those in a plurality system with similar ballot access requirements like that of Ukraine from 1993 to 1997. Other studies have investigated the effects of intra-party competition on a number of economic and policy outcomes, but not on economic reform defined broadly (Persson et al., 2001; Golden, 2003; Kunicova and Rose-Ackerman, 2005; Chang and Golden. 2006: Gaviria et al., 2004: Edwards and Thames. 2007; Hallerberg and Marier, 2004; Crisp et al., 2004, Garland and Biglaiser, 2009; Nielson, 2003; Hicken and Simmons, 2008). Here we address this gap in the literature. We provide the first systematic multivariate crosscountry test of the implications of the personal vote literature for economic reform using a measure of the electoral particularistic incentives based on Carey and Shugart (1995). We find that, in line with our theory, countries where electoral rules encourage the personal vote are less likely to reform.

#### 2. The literature

# 2.1. Electoral incentives and legislative support for targetable legislation

This study bridges two bodies of literature in the subfields of American and comparative politics. The first is the research on the effects of candidate-centered versus party-centered electoral incentives on legislative behavior. According to a number of important works in American politics, candidate-centered electoral rules motivate legislators to provide constituency service and pork, which produce votes (Mayhew, 1974; Fenno, 1978; Parker, 1986; Fiorina, 1989). The studies of the personal vote in the US context have inspired inquiry in comparative politics about the effects of candidate- versus party-centered electoral rules on legislative behavior. Evidence of an "electoral connection" that encouraged the personal vote was found in Britain (Cain et al., 1984, 1987). Empirical studies of the single nontransferable vote system of Japan (Ramseyer and Rosenbluth, 1993; McCubbins and Rosenbluth, 1995; Thies, 1998) and the open-list proportional representation system of Brazil (Ames, 1995a, 2001) underscore that strong intraparty competition encourages the provision of particularistic goods for which legislators could personally claim credit. Crisp et al. (2004) demonstrate the applicability of these ideas to legislative behavior in six presidential Latin American democracies. They find that general electoral rules that pit co-partisans against each other motivated legislators to initiate locally-oriented bills.

Our paper joins a small but growing body of literature that investigates the effect of the personal vote on various policy and political outcomes: corruption, economic growth, budget discipline, foreign direct investment, trade liberalization, efficacy of education spending (Persson et al., 2001; Golden, 2003; Kunicova and Rose-Ackerman, 2005; Chang and Golden, 2006; Gaviria et al. 2004, Edwards and Thames, 2007; Hallerberg and Marier, 2004; Crisp et al., 2004, Garland and Biglaiser, 2009; Nielson, 2003; Hicken and Simmons, 2008). In line with the predictions of the personal vote literature, most of these studies find that particularist electoral rules are associated with particularist policies. In countries where electoral rules encourage the development of the personal vote, individual legislators have an incentive to claim credit for providing private or local public goods. Being targetable, these goods are the most efficient way of improving their reputation with constituents. Conversely, in countries where electoral rules empower party leaders, legislators have an incentive to work together to enhance a collective reputation, claiming credit for broad programmatic policy changes (Cox and McCubbins, 2001). According to Golden (2003) and Chang and Golden (2006), electoral rules that encourage the personal vote lead to more corruption.<sup>1</sup> Garland and Biglaiser (2009) argue that candidate-centered electoral rules empower local interest groups supportive of foreign capital inflows, driving up the level of FDI.<sup>2</sup> According to Nielson (2003), electoral rules that reign in the personal vote are conducive to trade liberalization because they empower party leaders and executives, both of whom are concerned with the provision of public goods such as trade liberalization. Hallerberg and Marier (2004) investigate the relationship between budget discipline and electoral institutions in Latin America. They find that strengthening the executive, the only political actor with a truly national constituency, improves budget discipline in systems where electoral rules encourage the personal vote and the provision of particularistic goods to narrow groups.

#### 2.2. Implications for economic reform

The second relevant body of literature is the study of post-communist economic reform, where the personal vote has received surprisingly little attention. A vast literature has attempted to explain the variation of economic reform success in the post-communist countries. A body of research within this literature focused on initial conditions such as the institutional legacies of communism (Aslund et al., 1996; de Melo et. al. 1997, Gaddy and Ickes, 2002; Hewett, 1988; Hoff and Stiglitz, 2004; Kornai, 1992), historical factors (Abdelal, 2001; Bunce, 2005; Kurtz and

<sup>&</sup>lt;sup>1</sup> Persson et al. (2001) and Kunicova and Rose-Ackerman (2005) argue the opposite: that rules that reduce individual accountability such as closed-list proportional representation are associated with higher corruption. However, in contrast to Chang and Golden (2006), in their empirical analysis they do not control for district magnitude, which might have a significant impact on the level of intra-party competition.

<sup>&</sup>lt;sup>2</sup> Stronger particularist incentives do not necessarily hurt social welfare. Edwards and Thames (2007) argue that support for particularist projects drives down the overall level of government spending.

Barnes, 2002) or resource endowments (de Melo, 2001: Jensen, 2003: Stark and Bruszt, 1998). A second group of studies analyzes the international dimension and underscores geographic diffusion and European integration incentives (Przeworski, 1991a; Roland, 2000; Mattli and Plumper, 2002; Vachudova, 2005; Kopstein and Reilly, 2000; Grzymala-Busse, 2002). Another group of studies investigates the politics of economic reform and focuses on factors such as the post-communist power balance (Aslund et al., 1996; Fish, 1998; Frye and Mansfield, 2003; Przeworski, 1991b; Roeder, 1999; Williamson, 1994) at the moment of transition or political fragmentation (Andrews and Montinola, 2004; Dethier et al., 1999, Frye and Mansfield, 2003; Horowitz and Browne, 2008; Slantchev, 2005: Stone, 2002). Research on the effects of particular institutional choices on economic reform in the postcommunist countries has focused on the effects of presidentialism (Fish, 1998; Hellman, 1996; Horowitz, 2003; Ishivama and Velten, 1998: Kitschelt, 2001: Stepan and Skach, 1993) or decentralization (Berkowitz and Li, 1997; Qian and Roland, 1998; Treisman, 2000) and neglected the effects of electoral rules and their effects on intra-party competition in particular.

#### 2.3. Electoral rules: the inter- and intra-party dimension

Beyond the post-communist context, the economic reform literature has investigated the effect of electoral rules, but has considered narrow features of electoral institutions and has focused on their effects on fiscal policy as opposed to economic reform defined broadly (Grilli et al., 1991; Milesi-Ferretti, 2000; Persson and Tabellini, 1999, 2000; Stein et al., 1999). Empirical studies of the effects of electoral rules on economic policy rely on the simple proportional representation/single-member district divide and neglect features of electoral institutions that affect intra-party competition such as party control of access to the ballot. This empirical approach is to some extent driven by the focus on the effects of electoral rules on inter- as opposed to intra-party competition. A vast literature in political science (see for example, Amorim Neto and Cox, 1997; Duverger, 1954; Lijphart, 1994; Powell, 1982; Ordeshook and Shvetsova, 1994) has investigated the effect of electoral rules on inter-party competition, concluding that proportional rules are associated with more fragmented and polarized party systems. Because the diversity of views voiced in governments and legislatures is shaped by electoral rules and the constitutional distribution of power between the executive and the legislature, electoral rules affect economic policy indirectly, through their impact on political fragmentation. A number of studies have examined the effect of political fragmentation on fiscal policy (Edin and Ohlsson, 1991; Haan and Sturm, 1994; Hallerberg and von Hagen, 1999; Kontopoulos and Perotti, 1999; Stein et al., 1999) and economic reform in particular (Alesina and Drazen, 1991; Franzese, 2002, 2007; Haggard and Kauffman, 1995; Hallerberg and Basinger, 1998; Henisz and Mansfield, 2006; Keefer and Stasavage, 2003; Mansfield et al., 2007; Treisman, 2000; Tsebelis, 1995).

As this body of literature has shown, electoral rules affect the choice of economic policy and economic reform indirectly - through their influence on inter-party competition and political fragmentation. However, electoral rules affect the success of economic reform in a more direct way - through their effect on intra-party competition. Electoral rules determine the way seats are allocated not only between, but also within parties. If elections are dominated by intra-party competition, legislators will respond to this competition by building a personal reputation. The level of personalist incentives in a given electoral system has direct implications for the success of economic reform. Electoral rules that give individual politicians greater independence from party control are ill-equipped to overcome the collective action problems that lead to the under-provision of public goods. In particularistic systems, legislators compete for the support of localized or issue-specific constituencies and are less motivated to promote nationally-oriented economic policies (Weingast et al., 1981; Cain et al., 1987; Cox and McCubbins, 1993, 2001; Carey and Shugart, 1995; Nielson, 2003). Strong intraparty competition motivates legislators to provide targetable goods to politically important constituencies that will finance their campaign and help them get the votes required to win office (Ames, 1995a, 1995b; Cain et al., 1987; Carey and Shugart, 1995; Samuels, 1999). Legislators in candidate-centered systems are unlikely likely to support reforms that would deprive them of their ability to develop their own clientele through privileges such as specialized tariffs or quotas. Incentives in such political systems empower narrow groups, usually at the expense of social welfare. In the long run the median voter will benefit from broad economic reforms, but the concentrated costs of the constituents who benefit from privileges as compared to the diffuse benefits of the winners generally makes legislators more responsive to the latter (Geddes, 1994). Particularist policies are usually politically beneficial since "many voters do not notice widely dispersed welfare losses" (Ramseyer and Rosenbluth, 1993) and therefore are not likely to punish legislators who support particularistic policies. Conversely, systems where party leaders have significant sanctions over party members, such as control over ballot access or campaign finance for candidates, broad economic reforms should be more successful. Because the success of party leaders varies with that of the party as a whole, they are motivated to provide public goods to their constituents (see Cox and McCubbins, 1993).

Despite its substantive importance, the direct effect of electoral rules on economic reform has received little scholarly attention. Exceptions are Eaton and Maxfield (1999) and Eaton (2002). Eaton and Maxfield (1999) group a sample of developing countries according to the level of personalist incentives, an aggregate measure of economic reform and government spending and examine the data for indicative patterns. They argue that strong incentives to cultivate a personal vote seem to be associated with government spending and a lower level of economic reform. Eaton (2002) addresses the question using a contrasting cases qualitative approach. He compares the outcome of similar reform policies in the Philippines, a country with very particularistic electoral incentives, and Argentina, where closed-list proportional representation rules discourage the personal vote. He finds that in contrast to Argentina, particularistic electoral incentives prevented the president from enacting basebroadening tax reforms in the Philippines. Similarly, incentives to build a personal vote prevented the president from reversing fiscal decentralization in the Philippines until 1987, while party discipline in Argentina facilitated such efforts in the 1990s. Building on these important works, we provide the first cross-country multivariate systematic examination of the effects of the personal vote on the success of economic reform. We focus on postcommunist economic reform, for which the implications of electoral particularism are especially relevant.

#### 2.4. The personal vote and post-communist economic reform

Post-communist economic reform involves privatization, deregulation, fiscal discipline, and trade liberalization. While certain reform components, namely privatization, produce new private goods that could be used as patronage by politicians,<sup>3</sup> most components of post-communist economic reform such as price liberalization, competition policy, banking reform, and foreign trade liberalization reduce the ability of governments, bureaucrats, and politicians to provide privileges in the form of subsidies, monopoly privileges, and trade barriers. Furthermore, the radicalness of reform in the post-communist countries makes it especially conducive to particularistic incentives compared to economic reform in other developing countries. In contrast to economic reform in other parts of the world such as Latin America that can be best described as "structural adjustment," post-communist economic reform entailed a transition from one economic system to another. The state-controlled allocation of resources and the frequency of administered pricing in Eastern Europe necessitated additional steps such as deregulating most prices and eliminating price subsidies, lowering protection, adopting anti-monopoly measures, including measures against state monopolies (see Przeworski, 1991b) and in general reducing substantially state ownership and intervention in the economy. While this is expected to lead to efficiency gains in the long run, it also leads to significant political and economic losses for particular constituencies: "Where the state is asked to do fewer things, the ability of policy-makers in the state to make distinctions among individuals, firms, and groups is substantially compromised." (Eaton, 2002, p. 62). Because post-communist economic reform involves eliminating many policies that could be used by politicians in the newly-democratized polities to extract rents they could use to buy electoral support, in countries where building a personal vote is crucial for politicians' electoral prospects, radical economic reforms is likely to face stronger legislative resistance.

The neglect of the effect of electoral rules on legislative behavior is hardly justified in the context of the postcommunist countries, where in contrast to Latin America, many countries are parliamentary or semi-presidential systems.<sup>4</sup> This neglect of electoral incentives in the postcommunist reform literature is even more surprising given that empirical examples of their effects on the progress of reform abound. In 1994, the single-member district system gave significant voice to interest groups such as coal miners and collective farms in the Ukrainian parliament. These special interests successfully lobbied for credits from the central bank, which led to inconsistent monetary and fiscal policies and impeded reform (Stone, 2002, p. 177). The transition to a closed-list proportional system in 1994 and to a parliamentary system in 1999 accelerated voucher privatization in Croatia (Gehlbach and Malesky, 2010, p. 1). The narrow interests of particular regions and districts prevented the passage of important tax reform legislation and undermined many other presidential reform efforts in Yeltsin's Russia (Stone, 2002). Furthermore, several empirical studies of legislative voting in the Russian Duma have found that SMD deputies defect more often from the party line than their party list counterparts, as the personal vote literature would suggest (Haspel et al. 1998, Kunicova and Remington, 2008; Smith and Remington, 2001; Thames, 2001). While the results are far from conclusive and the magnitude of the effects of electoral mandate on party loyalty vary - even for Russian case - by time period, issue area and method of analysis, these findings suggest that legislators respond differently to the electoral incentives in the PR and SMD tiers of the mixed systems.

Political institutions are sometimes ascribed little explanatory power in the post-communist literature because once chosen, they do not substantially change. Thus, they cannot help us understand reform trajectory and the changing motivations of political actors (Kitschelt, 2001, p. 19, Gehlbach and Malesky, 2010, p. 6). According to this view, reform sequencing has greater explanatory power than historical legacies or political institutions. While Gehlbach and Malesky's point is well-taken, electoral rules in many post-communist countries have experienced substantial changes. Consequently, the relationship between legislators and their constituencies on the one hand, and legislatures and executives, on the other, has changed over time, which can help us understand the progress of reform over time or lack thereof.

We argue that electoral incentives have important consequences for the success of post-communist economic reform. The relationship between electoral rules and legislative support for particularistic policies is not deterministic: legislators in personalistic systems also care about public goods and legislators in party-centered systems sometimes support particularistic policies. However, electoral rules in particularistic systems make it easier for them to support policies that provide concentrated benefits to

<sup>&</sup>lt;sup>3</sup> Legislators facing particularistic incentives could structure privatization to benefit particular constituencies by letting reform opponents purchase state assets at basement prices. On the other hand, privatization prevents politicians from directing contracts to inefficient state enterprizes.

<sup>&</sup>lt;sup>4</sup> In political science research, many post-communist countries are classified as parliamentary. Still, there is significant variation in the powers of presidents and legislatures within both presidential and parliamentary systems (see Siaroff, 2003).

small politically important constituencies (Eaton, 2002, pp. 44–45). We expect stronger electoral incentives to build a personal vote to be associated with less significant reform progress.

#### 3. Measurement and research design

#### 3.1. The dependent variable

To measure the success of economic reform, we employ a widely used measure based on an index provided by the European Bank for Reconstruction and Development (e.g., EBRD 2005). EBRD evaluates reform progress on a scale from 1 to 4.3 along eight policy dimensions: largescale privatization, small-scale privatization, governance and enterprize restructuring, price liberalization, trade and foreign-exchange system, competition policy, banking reform and interest-rate liberalization, and securities markets and non-bank financial institutions. The highest score along each dimension is roughly equivalent to the level typical of a developed market economy. Numerous studies have used the average of the eight rankings as an indicator of economic reform in the post-communist reform. To facilitate interpretation of results, we rescale this variable to take values from 0 to 100, where 100 indicates the highest level of reform. We call this variable Reform Progress (see Table 1 for country average scores).

#### 3.2. Explanatory variables

The major interest of this article is to investigate the effect of electoral institutions on economic reform. We use two alternative measures of our main explanatory variable. First, we use a particularism index based on Carey and Shugart's (1995) ranking of electoral rules. Carey and Shugart (1995) create a measure of the incentives to build a personal vote across countries based on three scores. The first indicator *Ballot* captures the extent to which party leaders control access to the ballot. Countries where voters

#### Table 1

Average reform score, 1990-2006 (Source: EBRD).

Albania	49.54
Armenia	48.32
Azerbaijan	36.92
Belarus	22.76
Bulgaria	59.25
Estonia	73.33
Georgia	48.07
Hungary	81.91
Kazakhstan	48.02
Kyrgyzstan	51.88
Latvia	65.39
Lithuania	66.25
Macedonia	56.08
Poland	83.16
Romania	55.15
Russia	54.08
Slovakia	73.73
Slovenia	67.53
Tajikistan	32.09
Turkmenistan	9.6
Ukraine	44.69
Uzbekistan	31.46

cannot disturb the party list are assigned a score of "0". countries where leaders exist but where voters may disturb the list are given a score of "1," while countries where leaders have no control over the list are scored a "2." The logic behind this score is that legislators have weaker incentives to build a personal vote if party leaders determine who appears on the ballot. The second indicator Pool refers to the way votes are pooled. Countries where votes are pooled across the party are scored a "0," countries where there is pooling at the sub-party level are scored a "1," and countries where there is no pooling at all are scored a "2." Candidates are expected to care less about the personal vote when votes are pooled at the party level. The third indicator Vote takes into account the number of votes a voter can cast: "0" represents the case where voters have one vote, "1" is the case where voters cast multiple votes, and "2" is the case where individuals have one vote only at the sub-party level (i.e., for a party faction or an individual). A number of studies have relied on measures of the personal vote based on Shugart and Carey's (1992) ranking (Persson et al., 2001; Golden, 2003; Kunicova and Rose-Ackerman, 2005; Chang, 2005; Gaviria et al. 2004, Edwards and Thames, 2007; Hallerberg and Marier, 2004; Crisp et al., 2004; Garland and Biglaiser, 2009; Nielson, 2003). We use Wallack et al.'s (2003) coding of Ballot, Pool, and Vote. The dataset was extended to 2006 and to all the countries in the sample following Wallack et al.'s (2003) coding scheme.

Following Wallack et al. (2003), we operationalize the personal vote as the average of scores for each component (*Ballot, Pool,* and *Vote*). We also interact the personal vote measure with district magnitude (logged). We expect large district magnitude will reinforce the personal vote in systems with personalistic electoral rules: if candidates must distinguish themselves from a large number of partisans, they might be more concerned with targeting private goods to political supporters than with the provision of public goods. In contrast, in party-centered electoral systems, greater district magnitude should lead to even weaker incentives to build a personal vote because it makes personal reputation less important (Carey and Shugart, 1995; Shugart et al., 2005; Chang and Golden, 2006; Edwards and Thames, 2007).

Following previous studies, particularism in the mixed systems is operationalized as the weighted average of the value of the particularism index in each tier (see Wallack et al., 2003).<sup>5</sup> This approach assumes that: mixed electoral systems are associated with an intermediate level of personalist incentives; personalistic incentives in each individual tier of the mixed system are the same as those in a 'pure type' and that the two tiers are independent.<sup>6</sup> A growing body of literature has come to question the assumption of independence. Some sources of contamination or dependence between the tiers are particular institutional features of the mixed systems such as double

 $<sup>^{5}</sup>$  Out of the 279 observations in the dataset, 123 come from mixed systems.

 $<sup>^{\</sup>rm 6}$  Mixed electoral systems are outside Carey and Shugart's (1995) theoretical model.

nominations.<sup>7</sup> According to the contamination school. hedging at the electoral stage leads to hedging at the legislative stage. Because double-nominated SMD candidates split the difference between the incentives in each tier (Cox and Schoppa, 2002; Klingemann and Wessels, 2001; Bawn and Thies, 2003), a mixed electoral system might not be associated with an intermediate level of particularism, depending on the frequency of double nominations. The strategic interests of the party, which might dominate those of the individual legislator, are another source of dependence.<sup>8</sup> The empirical evidence of mandate-type differences on party loyalty is inconclusive. Most studies of legislative voting in the Russian Duma have found some evidence of an electoral mandate divide in the expected direction (Haspel et al., 1998, Kunicova and Remington, 2008; Smith and Remington, 2001; Thames, 2001). Empirical studies of legislative voting in Hungary or Lithuania (Thames, 2005) or, beyond the postcommunist context. Italy have not identified an electoral mandate effect. Similarly, the contamination versus independence between the tiers debate is far from settled. In empirical studies, some works have not found evidence of contamination (see Moser and Scheiner, 2004), while others (Cox and Schoppa, 2002; Herron and Nishikawa, 2001; Mizusaki and Mori, 1998) have identified contamination effects. To avoid making the unwarranted assumption that the PR and SMD tiers in the mixed systems are independent, we use a second measure of the extent to which electoral institutions encourage the personal vote.

As an alternative to the particularism index, we create dummy variables for four stylized electoral rules: plurality, closed-list proportional representation, open-list proportional representation, and mixed electoral systems. The electoral system variables are based on World Bank's Database on Political Institutions as described by Beck et al. (2001). While the particularism index is a more elaborate measure that captures many more features of electoral systems that make them more party- or candidate-centered, its aggregation method requires making assumptions<sup>9</sup> that might make it somewhat difficult to interpret. To address this, we observe whether and how the results change with the simpler classification of electoral systems, which could still serve as a proxy for the causal

story we present. We expect open-list proportional representation, especially at high district magnitude, to be associated with stronger personalistic incentives and less successful reform than closed-list proportional representation systems. According to the personal vote literature, electoral rules that encourage intra-party competition such as OLPR encourage the personal vote. The extent of intraparty competition should increase with the number of candidates, or district magnitude (Carey and Shugart, 1995; Shugart et al. 2005). We expect plurality systems to be associated with stronger personalistic incentives and less successful reform than closed-list proportional representation systems. At high district magnitude, personalistic incentives in open-list proportional representation systems might exceed those in plurality systems.<sup>10</sup> We do not have strong theoretical expectations about the mixed systems, which we code as a separate category.

#### 3.3. Control variables

To measure presidential powers, we use Siaroff's (2003) coding of countries on a scale of 1–9.<sup>11</sup> Theoretical work on the interaction between executive powers and the personal vote is inconclusive. On the one hand, strong executive powers could decrease particularism, especially if electoral rules encourage the personal vote. Compared to rank-andfile legislators, presidents might be more motivated to supply public goods given that they are political actors with nation-wide constituencies (Hallerberg and Marier, 2004; Nielson, 2003). On the other hand, presidents with strong prerogatives might be prone to clientelism (Kitschelt, 2000: Shugart and Carey, 1992), especially when they lack partisan support in the legislature. Personalist electoral incentives might make legislators more susceptible to presidential patronage, thus reinforcing particularism in presidential systems (Ames, 1995a; Thames, 2007). The separate elections of legislators and the president allows the former to demand targetable goods in exchange for passing the government's bills, further increasing particularism in presidential systems (Eaton, 2002, p. 18, Crisp et al. 2004). Recent works has generally found that presidentialism decreases particularism when electoral rules encourage the personal vote (Nielson, 2003; Hallerberg and Marier, 2004). To test for interactive effects between the personal vote and presidentialism, we include a multiplicative term.

The progress of reform might be positively associated with the wealth of a particular country (Heybey and

<sup>&</sup>lt;sup>7</sup> In most mixed systems, candidates are allowed to run simultaneously in the PR and the SMD tier.

<sup>&</sup>lt;sup>8</sup> Bawn and Thies (2003) have argued that legislators in mixed systems might be even less responsive to unorganized interests than their counterparts in pure PR systems: 'list specialists' in the mixed systems should be even more susceptive to interest groups than candidates in plurality systems because they expect their SMD colleagues to compensate for the negative effects of this strategy on the popularity of the party by providing district voters with constituency service and their is no compensating effect for the "SMD specialists." Technically, as Bawn and Thies admit, the effect of electoral rules on the personal vote is outside their model: they focus on legislative responsiveness to unorganized voters and organized interest groups and see targeted policies as "straddling the divide between serving unorganized voters and organized interest groups" (Bawn and Thies, 2003).

<sup>&</sup>lt;sup>9</sup> For instance, the assumption that *Ballot*, *Pool*, and *Vote* tap equally well the personal vote or that the *Ballot*, *Pool*, and *Vote* scores can be treated as interval data.

<sup>&</sup>lt;sup>10</sup> A number of empirical studies have found that targetable policy outputs and pork-barrel policy goods are more common in majoritarian electoral systems than under PR (Milesi-Ferreti et al., 2002; Lizzeri and Persico, 2001; Persson and Tabellini, 2003), but these studies do not control for district magnitude. According to Carey and Shugart (1995), SMD systems party endorsement should be associated with the lowest personalistic incentives, and those with open endorsement and without a primary, should be associated with the highest personalistic incentives. Wallack et al. (2003) argue that SMD (even those with party endorsement) encourage a stronger personal vote than closed-list proportional representation systems because SMD candidates gain.

 $<sup>^{11}</sup>$  The dataset was extended to 2006 and to cover all countries in the sample.

Murrell, 1999; Merlevede, 2003). To take this into account, we use GDP (logged) *per capita* measured in US dollars. Government partisanship can significantly affect economic policies. To account for this possibility, we include a measure from Armingeon and Careja (2004) based on of the proportion of seats in the legislature held by members of unreformed communist parties (communists in legislature). Some post-communist countries were involved in interstate or civil war, for example, Armenia 1992–1994, Azerbaijan 1992–1994, Russia 1994–96, 1999. Violence can interfere with the progress of economic reform (Horowitz, 2003). To capture this effect, we include a dummy variable (war) to measure whether the country was involved in a violent conflict during a particular war in the time series.<sup>12</sup>

Democracy is likely to have a significant impact on reform progress. Democratic institutions allowed the dislodging of the old elites and interest groups with a vested interest in partial reform (Fish, 1998; Hellman, 1998), Given that the losers from partial reform outnumber the winners, we should expect a more inclusive political regime to empower the losers and contribute to more radical reform (Horowitz, 2003). Previous studies have found that democracy is associated with more advanced reforms and less reform partialness (Hellman, 1998; Frye, 2010 Horowitz, 2003; Slantchev, 2005). Our measure of democracy is based on the PARCOMP variable from the POLITY dataset, which captures the extent to which political participation is free from government control (Marshall and Jaggers, 2006). The composite POLITY measure includes a measure of constraints on executive decision-making, which is similar to our measure of presidentialism.<sup>13</sup>

#### 3.4. Statistical analysis

The data are gathered over time and across countries (25 countries in East-Central Europe for the years 1990-2006). The statistical analysis of economic reform raises a number of methodological issues that standard OLS cannot handle. First, the variances of the 25 time series are probably different because political and economic factors affect the countries in the sample in different degrees. Second, it is reasonable to suppose that exogenous shocks such as economic crises affect all countries in the sample, which means that the error terms should be correlated across panels. Third, we should expect some autoregressive country-specific process to affect the dependent variables such as, for instance, the communist legacy (Kitschelt et al., 1999). In order to correct for these, as a first method of estimation we use panel-corrected standard errors and a lagged dependent variable (Beck and Katz, 1995; Keele and Kelly, 2006). Another important methodological issue that the analysis of economic reform raises is that of reverse causation. That is, economic outcomes may be driving the choice of electoral

institutions rather than vice versa. In post-communist countries characterized by concentrated political power, clientelism, unprofessional state apparatus, and weak opposition movements, where market liberalism remains weak, the former ruling parties advocate and usually have the ability to impose majoritarian electoral rules that would reward them with disproportionate political power (Kitschelt et al., 1999, p. 32). If this is the case, the personal vote variable might be correlated with the error term, which is a violation of OLS. More generally, endogenous regressors would imply that OLS estimates would be biased and inconsistent.

To address the endogeneity problem, as a second estimation technique we use "difference GMM" (generalized method of moments) estimator suggested by Arellano and Bond (1991), which differences the regression equations and uses lagged values of the level variables as instruments.<sup>14</sup> The estimator first differences the levels equations to remove the unit fixed effects and to subsequently instrument the first-differenced pre-determined and endogenous variables on lags of the levels variables sufficiently deep to be uncorrelated with the first-differenced error term. This model assumes that the error terms are coserially uncorrelated, which can be examined by checking that the first-differenced residuals do not exhibit second-order serial correlation. In order not to increase the number of variables to be instrumented, which might overfit the pre-determined and endogenous variables and thus bias parameter estimates toward their OLS counterparts, we use only the first exogenous lag for any variable to be instrumented.

#### 4. Empirical results

The estimation results are presented in Tables 2–6. We find strong support for our main hypothesis strong personalist incentives are associated with less successful post-communist economic reform. In Models 1-6, a negative coefficient indicates that an increase in the personal vote is associated with less significant reform progress. The Personal Vote has a negative and significant coefficient in all models. Due to the inclusion of interaction terms, it is difficult to evaluate the direction and significance of the Personal Vote based on the raw coefficients. For a more substantive grasp of the effects of the personal vote on the success of economic reform, we calculate the expected value of Reform Progress at substantively interesting values of the Personal Vote, namely its mean (0.934), one standard deviation below and above the mean (0.339 and 1.467 respectively), and 1.5 standard deviation below and above the mean (0.132 and 1.735). As expected, strong incentives to build a personal vote are associated with less successful reforms (Table 3) and the relationship is substantively significant. Increasing the Personal Vote in Models 1-6 from its mean to one standard deviation above the mean is associated with a decrease in reform success that ranges from 3.7% (Model 1 and 5) to 4.2% (Model 3). Increasing the

<sup>&</sup>lt;sup>12</sup> Data from Armingeon and Careja (2004).

 $<sup>^{13}</sup>$  The correlation between POLITY and the presidentialism score is -0.70. The correlation between 'PARCOMP' and the presidentialism score is 0.55.

<sup>&</sup>lt;sup>14</sup> The Arellano–Bond models are estimated using the xtabond2 command in Stata (Roodman, 2006).

Table 2			
The personal	vote and	economic	reform

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS-PCSE	Arellano-Bond				
Lagged Reform	0.591*** (0.029)	0.406*** (0.069)	0.498*** (0.059)	0.579*** (0.052)	0.562*** (0.055)	0.574*** (0.049)
Personal Vote	-13.045***	-7.278***	-11.62***	-12.936***	-12.615***	-11.382***
	(1.717)	(1.989)	(3.236)	(3.271)	(3.201)	(3.229)
District Magnitude (DM) (logged)	0.018 (0.308)	0.274 (0.251)	0.108 (0.305)	0.05 (0.305)	0.115 (0.332)	-0.199 (0.283)
Presidentialism	-0.781*** (0.185)	0.612 (0.658)	-0.392 (0.463)	-0.753 (0.64)	-0.616 (0.619)	-0.688(0.599)
GDP Per Capita (logged)	2.773*** (0.593)	4.917** (1.606)	3.977** (1.364)	2.784** (1.259)	3.092** (1.375)	3.132** (1.245)
Communists in the Legislature	-0.022 (0.191)	0.162 (0.186)	0.079 (0.191)	-0.011 (0.164)	0.058 (0.182)	0.026 (0.172)
Political Competition	1.599** (0.292)	1.634** (0.585)	1.62*** (0.495)	1.629*** (0.413)	1.563*** (0.403)	1.797*** (0.472)
War	0.141 (0.537)	0.428 (1.545)	0.479 (1.362)	0.062 (0.926)	0.084 (1.051)	-0.094(0.979)
Proportional Representation						2.684* (1.484)
Personal Vote*D M (logged)	0.015 (0.015)		0.016 (0.021)	0.014 (0.025)	0.006 (0.027)	0.031 (0.02)
Personal Vote*Presidentialism	1.375*** (0.242)		0.849* (0.504)	1.369** (0.651)	1.309** (0.633)	1.236* (0.609)
Constant	3.84 (4.694)	1.954 (10.549)	7.693 (9.803)	12.332 (9.079)	10.827 (9.951)	8.041 (9.813)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	No	Yes	Yes	Yes	Yes	Yes
Observations	279	279	279	279	279	277
Panels	22	22	22	22	22	22
Chi-square		4971.05***	427.83***	1501.10***	792.52***	4577.47***
Arellano-Bond AR (2) test		-0.26	-0.31	-0.48	-0.45	-0.44
p-value, Arellano-Bond AR (2)		0.795	0.755	0.657	0.63	0.65
test						
R <sup>2</sup>	0.98					

Notes: \*\*\*p < 0.01, \*\*p < 0.05, \*p < 0.10. Table entries for Model 1 are OLS estimates with panel-corrected standard errors. Models 2–6 are estimated via Arellano–Bond, one-step system estimator; the following variables treated as endogenous: Personal Vote, Personal Vote\*District Magnitude (logged), Presidentialism, Presidentialism\*Personal Vote, (Models 2–6); GDP (logged) (Model 4–6), Political Competition (Model 4). Calculated using STATA 10.11 *xtabond2* procedure. Robust standard errors are reported in parenthesis for Models 2–6.

Personal Vote from its mean to one standard deviation an a half above the mean is associated with a decrease in reform success that ranges from 5.6% in Model 1 to 7.5% in Model 5. In Models 1–5, reform progress when the personal vote is 1.5 standard deviation below the average, is statistically distinguishable from reform progress when the personal vote is 1.5 standard deviation above the average at the 95% confidence level. In Model 6, they are distinguishable at the 90% confidence level. We find it reassuring that estimation of the model with OLS-PCSE (Models 1 and 7), which emphasizes efficient estimation, and with Arellano-Bond (Models 2-6 and 8-11), which emphasizes minimization of bias, generate substantively similar results. An OLS model without a lagged dependent variable and with two-way fixed effects (country and year) and robust standard errors generates similar results (results available upon request).

While a direct comparison of the estimation results from Models 1–6 and 7–11 is not possible because the particularism index is based on many more electoral system features, they generally generate substantively similar results. Electoral rules characterized by low personalist incentives such as *CLPR* are associated with more successful reform than more personalist systems such as *OLPR* or *Plurality*. In all models except Model 8 (see Table 4), the coefficients of *CLPR* are positive and significant, while the coefficient of *OLPR* is negative and significant (*Plurality* is the omitted category). Similar to Models 1–6, it is difficult to interpret the results based on the raw coefficients due to the inclusion of interaction terms. To evaluate the substantive effect of electoral rules, in Table 5 we calculate the expected value of Reform Progress for different electoral systems. In all models except Model 8, which excludes the interaction terms of electoral rules with district magnitude and presidentialism, economic reform is least successful in open-list proportional representation systems, followed by plurality.<sup>15</sup> The substantive effect of OLPR at the average district magnitude (logged) is statistically indistinguishable from that of Plurality: the 95% confidence intervals of reform in OLPR and that in Plurality overlap. The electoral system with the lowest personalist incentives CLPR is associated with the most successful economic reforms. For most models, the predicted value of reform is higher and statistically distinguishable from that in OLPR and Plurality. The predicted value of economic reform progress in OLPR is statistically distinguishable from reform in Mixed systems in Models 7, 9, 10, and 11. In all models, economic reform in Mixed systems is statistically indistinguishable from that in CLPR systems at the 95% confidence level. This does not necessarily imply that mixed systems are associated with an intermediate level of personalistic incentives as we do not distinguish among different kinds of mixed electoral systems. Mixed electoral systems exhibit great variety (see Massicotte and Blais, 1999). To mention just a few distinctions, in some mixed systems the majoritarian component is dominant while in others the proportional component is the dominant one; in

<sup>&</sup>lt;sup>15</sup> In the calculation of the predicted value of reform, district magnitude is at 0 in plurality systems (which corresponds to district magnitude of 1) and at the average of 1.868 for the other electoral systems.

#### Table 3

Predicted values of Reform Progress at different levels of the Personal Vote (War = 0; Proportional Representation = 1; all other variables at means; 95% confidence interval in parenthesis).

Personal Vote	0.132	0.399	0.934	1.467	1.735
Model 1	56.7 (53.8, 59.6)	54.8 (51.9, 57.7)	50.9 (47.8, 54.2)	47.2 (43.4, 50.9)	45.3 (41.1, 49.5)
Model 2	67.8 (61.1, 74.4)	65.8 (60, 71.6)	61.9 (57.7, 66.2)	58.1 (54.7, 61.4)	56.1 (52.8, 59.4)
Model 3	66.5 (60.5, 72.4)	64.4 (59.3, 69.4)	60.1 (56.5, 63.7)	55.9 (52.7, 59)	53.7 (50.3, 57.2)
Model 4	64.9 (59.6, 70.3)	63.1 (58.5, 67.6)	59.3 (55.9, 62.7)	55.5 (52.1, 58.9)	53.6 (49.8, 57.5)
Model 5	65.4 (59.9, 70.9)	65.4 (59.9, 70.9)	63.5 (58.9, 68.2)	59.8 (56.3, 63.3)	56 (52.4,59.7)
Model 6	66.3 (61.2, 71.3)	64.6 (60.3, 68.9)	61.4 (57.8, 65)	58.2 (53.8, 62.5)	56.6 (51.4, 61.7)

#### Table 4

The personal vote and economic reform.

	(7)	(8)	(9)	(10)	(11)
	OLS-PCSE	Arellano-Bond			
Lagged Reform OLPR CLPR Mixed District Magnitude (log) Presidentialism GDP Per Capita (log) Communists in the Legislature Political Competition War OLPR*District Magnitude (log) CLPR*District Magnitude (log) Mixed*District Magnitude (log) OLPR*Presidentialism CLPR*Presidentialism	0.623*** (0.022) -23.906** (9.305) 11.609** (5.292) 18.031** (5.783) 7.382*** (2.009) 1.218* (0.717) 1.769*** (0.439) -0.137 (0.115) 2.756*** (0.412) 0.239 (0.405) 2.833 (2.464) -4.239*** (1.233) -7.352*** (1.998) -1.829** (0.75) -1.343* (0.816) -0.589 (0.742)	0.584*** (0.005) 7.739*** (2.252) 3.871** (1.221) 2.057** (0.865) 0.261 (0.236) 0.263 (0.294) 3.057** (1.41) -0.224 (0.299) 2.631*** (0.742) 0.353 (1.052)	$\begin{array}{c} 0.61^{***} (0.048) \\ -22.997^{*} (12.486) \\ 9.774^{*} (5.382) \\ 17.54^{***} (3.504) \\ 9.548 (6.158) \\ 1.071^{*} (0.586) \\ 1.522 (1.671) \\ -0.146 (0.293) \\ 2.668^{***} (0.724) \\ 0.277 (0.953) \\ 0.727 (6.137) \\ -5.56 (3.821) \\ -9.551 (6.287) \\ -1.654^{**} (0.643) \\ -1.172^{*} (0.651) \\ 0.005 (1.471) \end{array}$	$0.623^{***}(0.046)$ $-23.823^{**}(11.844)$ $10.823^{**}(4.982)$ $17.802^{***}(3.484)$ 8.252(5.386) $1.159^{**}(0.567)$ 1.519(1.513) -0.146(0.289) $2.73^{***}(0.748)$ 0.379(0.909) 2.039(5.537) -4.779(3.343) -8.268(5.485) $-1.775^{**}(0.653)$ $-1.279^{**}(0.616)$ -0.343(1.278)	$\begin{array}{c} 0.623^{***} (0.046) \\ -24.029^{**} (11.908) \\ 10.777^{**} (4.988) \\ 17.763^{***} (3.493) \\ 8.263 (5.383) \\ 1.147^{**} (0.568) \\ 1.52 (1.513) \\ -0.144 (0.289) \\ 2.741^{***} (0.753) \\ 0.379 (0.905) \\ 2.061 (5.539) \\ -4.789 (3.342) \\ -8.277 (5.481) \\ -1.765^{**} (0.653) \\ -1.269^{**} (0.616) \\ -0.335 (1.278) \end{array}$
Constant	-31.568*** (7.953)	-8.537 (10.378)	-15.108 (12.944)	-15.728 (12.312)	-15.717 (12.323)
Country Fixed Effects Year Fixed Effects	Yes No	Yes Yes	Yes Yes	Yes Yes	Yes Yes
Observations Panels	286 22	286 22	286 22	286 22	286 22
Chi-square Arellano-Bond AR (2) test <i>p</i> -value, Arellano-Bond AR (2) test <i>R</i> <sup>2</sup>	0.979	920*** -0.27 0.784	9675.23*** -0.11 0.728	11772.34*** -0.14 0.892	854086.1*** -0.14 0.892

Notes: \*\*\*p < 0.01, \*\*p < 0.05, \*p < 0.10. Table entries for Model 7 are OLS estimates with panel-corrected standard errors. Models 8–11 are estimated via Arellano–Bond, one-step system estimator; the following variables treated as endogenous: Personal Vote, Personal Vote\*District Magnitude (logged), Presidentialism, Presidentialism\*Personal Vote, (Models 8–11); GDP (logged) (Models 9–11), Political Competition (Model 9). Calculated using STATA 10.11 *xtabond2* procedure. Robust standard errors are reported in parenthesis for Models 8–11.

some, there is a link between the SMD and the proportional tier while in others the two tiers are independent; some allow double nominations (candidates running simultaneously on party lists and in SMDs) while others do not.<sup>16</sup> These institutional variations might lead to variations in the personal vote within the mixed systems. If this is the case, conflating all mixed systems into a single category might explain the indistinguishability of the category from *CLPR*. Because the theoretical literature on personalistic incentives in the mixed systems is still nascent, we put off discussion of the issue for future work.

Our results are consistent with our argument that the simple SMD/PR distinction is not the most important

aspect of variation in electoral institutions for the progress of economic reform. In Model 6, we include a dummy variable for Proportional Representation systems. The coefficient of Particularism (as well as its conditional coefficient) is still negative and significant. Within proportional representation systems, the predicted level of economic reform progress where the Personal Vote is low (1.5 standard deviation below its mean) is statistically distinguishable at the 90% confidence level from the level of reform progress where the personal vote is high (1.5 standard deviation above its mean). This shows that our measure of electoral personalist incentives, which goes beyond the simple PR/SMD distinction and takes into account ballot access, the way votes are pooled, and the number of votes voters cast, explains additional variation that the PR dummy does not tap. This is confirmed by the results from the models that use electoral system dummies: in Models 7, 9, 10, and 11, OLPR has a negative

<sup>&</sup>lt;sup>16</sup> Almost all countries that employed mixed electoral systems used mixed majoritarian systems. Only Albania (1991–present), Bulgaria (1990–91) and Hungary (1990–present) employed mixed systems that link the proportional and the plurality tier.

Table 5

Predicted values of Reform Progress in different electoral systems (District Magnitude (logged) = 1.868 for OLPR, CLPR, and Mixed, 0 for Plurality; War = 0; all other variables at means, 95% confidence intervals in parenthesis).

	OLPR	CLPR	Plurality	Mixed
Model 7	15.9 (2.5, 29.4)	40.4 (35.5, 45.2)	28.6 (19.8, 37.5)	44.2 (40.5, 47.9)
Model 8	62.7 (56.3, 69.1)	58.8 (54.3, 63.3)	54.5 (50, 58.9)	57 (53.7, 60.4)
Model 9	30.8 (14.4, 47.2)	53.9 (50.3, 57.4)	41.7 (33, 50.3)	59.2 (52.9, 65.6)
Model 10	30.1 (13.7, 46.6)	54.1 (50.9, 57.3)	42.3 (34.2, 50.4)	58.6 (52.8, 64.3)
Model 11	30 (13.5, 46.5)	54.1 (50.9, 57.3)	42.3 (34.2, 50.4)	58.6 (52.8, 64.3)

and significant coefficient while CLPR has a positive and significant coefficient. At the average District Magnitude (logged), in all models except Model 8, OLPR is associated with the lowest level of economic reform progress, while CLPR is associated with the highest (see Table 5). This demonstrates that, as we hypothesize, OLPR systems, where candidates must distinguish themselves from more candidates compared to plurality systems are associated with stronger intra-party competition and can increase particularism to that in plurality systems and beyond. As a result, reform progress in OLPR systems is the lowest. Conversely, CLPR rules make personal reputation less important and reduce to incentives for candidates to oppose broad national reforms that reduce their ability to target private goods to politically important constituencies.

According to our results, the effect of the personal vote does not depend significantly on district magnitude. In Models 1, 3-6, the conditional coefficient of the personal vote and its interaction terms is negative and significant at all values of district magnitude (logged) and its magnitude does not change significantly if at all as district magnitude increases.<sup>17</sup> This result runs against Carey and Shugart's argument that as district magnitude increases, particularism should increase in OLPR and decrease in CLPR. In their study of corruption, Chang and Golden (2006) find support for this claim: corruption (illegal campaign contributions in particular) is higher in CLPR than in OLPR at low levels of district magnitude but lower at high levels of district magnitude. While additional research is necessary to explain the difference in results, it could be driven by the fact that Chang and Golden (2006) focus on electoral dynamics and illegal activities, namely on the effect of electoral incentives on illicit campaign contributions. It is plausible that illegal campaign contributions have a more immediate impact on a candidate's popularity and lower costs for candidates, being illicit activities, compared to support for particularistic policies, which might hurt the party's reputation. Even if support for particularistic anti-reform policies helps a legislator build local popularity, placing such a candidate on top of a closed list in small magnitude districts might disadvantage a pro-reform party. As a result, we might not observe stronger support for particularist policies in CLPR systems and significant differences between OLPR and CLPR systems, when district magnitude is low.

The results with respect to Presidentialism are more mixed. It has a negative and significant coefficient in Model 1, insignificant coefficients in Models 2-6, and a positive and significant coefficient in Models 7 and 9-11. Similarly to the effects of electoral rules, it is difficult to evaluate the effect of Presidentialism solely on the basis of the raw coefficients due to the inclusion of interaction terms. To facilitate interpretation, we estimate the effect of presidentialism at different levels of the personal vote and in different electoral systems. In Models 1-6, presidentialism has an insignificant effect on economic reform at low levels (below average) of the personal vote and positive and significant effect at high levels (above average) of the personal vote (see Fig. 1). In Models 7-11, presidentialism has a negative and significant effect only in open-list proportional systems (see Table 6). The results from Models 1-6 are consistent with Nielson's (2003) and Hallerberg and Marier's (2004) argument that presidentialism has a constraining effect on particularism where electoral rules encourage it. However, our results from Models 7-11 seem to go against it. Presidentialism does not have a significant effect in plurality systems and while it has a significant effect on reform in OLPR, a system with relatively strong personalist incentives, it is not in the expected direction: presidentialism is associated with less significant reforms in OLPR systems. Because the particularism measure includes many more features of electoral institutions and thus better captures personalist incentives, we believe that the results from Models 1-6 should be



**Fig. 1.** Estimated conditional effect of Presidentialism at different levels of the Personal Vote. Bars depict 95% confidence intervals for a one standard deviation increase in Presidentialism, using estimates from Model 5 of Table 1.

 $<sup>^{17}\,</sup>$  All other models generate results very similar to those presented in the figure.

572

Table 6

Estimated effect of Presidentialism for one standard deviation increase in Presidentialism (95 % confidence intervals in parenthesis).

	OLPR	CLPR	Plurality	Mixed
Model 7	-1.4 (-2.4, -0.5)	-0.3 (-1.8, 1.3)	2.8 (-0.4, 6)	1.5 (0.6, 2.3)
Model 9	-1.3 (-2.7, -0.02)	-0.2 (-0.9, 0.5)	2.5 (-2.4, 7.3)	2.5 (-0.2, 5.1)
Model 10	-1.4 (-2.7, -0.1)	-0.3 (-0.9, 0.4)	2.3 (0.1, 5.2)	1.9 (-2.1, 5.9)
Model 11	-1.4 (-2.7, -0.2)	-0.3 (-0.9, 0.4)	-0.2 (-1.9, 1.5)	1.9 (-2.1, 5.9)

given greater weight. As expected, *Political Competition* has a positive and significant coefficient in all models. Economic development measured by *GDP per capita (logged)* has a positive and significant coefficient in most models. *War* and *Communists in the Legislature* have an insignificant effect on the success of economic reforms.

#### 4.1. Robustness checks

We subject our results to a number of robustness checks. As we note earlier, unlike other components of economic reform, privatization produces private goods that can be used as patronage by politicians. To demonstrate that our results are not driven by the privatization components of the economic reform measure, as a robustness check we drop from our economic reform progress measure small and large-scale privatization. Our results are robust to dropping privatization: more personalist electoral rules have a negative and significant effect on reform progress and the magnitude of the coefficients is even larger in most models (the results are available in the online Appendix A). In an alternative specification, we control for the indirect effect of electoral rules on economic reform, namely, through political fragmentation, which is partially shaped by electoral rules. In particular, proportional representation is associated with a larger number of effective parties in governments and legislatures (Amorim Neto and Cox, 1997; Duverger, 1954; Lijphart, 1994; Ordeshook and Shvetsova, 1994; Powell, 1982; Riker, 1982). The level of political fragmentation has implications for the success of economic reform: the political economy literature suggests that politically fragmented governments and legislatures are less able to agree on policy changes (1995, Alesina and Drazen, 1991). We include a measure of legislative fragmentation, captured by the probability that two deputies picked randomly from the government parties will be of the same party.<sup>18</sup> The personal vote variable still has a negative and significant coefficient and its magnitude does not significantly change. The conditional coefficient of the personal vote and its interaction terms is still negative and significant (see the online Appendix A). Political Fragmentation has a negative but insignificant coefficient. In the alternative specification that includes the electoral system dummies, we observe the same substantive results when Political Fragmentation is included. The results do not change when we use a different proxy for political fragmentation, namely the probability that two deputies picked randomly from the legislature will be of the same party. Our results also hold if

presidentialism is treated as exogenous in the Arellano– Bond specifications (see the online Appendix A).

#### 5. Implications and conclusions

Our empirical findings support our hypothesis that more individualistic electoral rules that motivate legislators to develop a personal vote are not conducive to economic reform. Legislative responsiveness to narrow as opposed to broad national interests is a function of electoral rules. Electoral rules that encourage the personal vote lead to legislative opposition to reform because they eliminate the privileges legislators could use as patronage. Generally, our results are consistent with the conclusions of the personal vote literature: particularist electoral incentives are associated with particularist policies and the lower provision of public goods (Persson et al., 2001; Golden, 2003; Kunicova and Rose-Ackerman, 2005; Chang and Golden, 2006; Gaviria et al. 2004, Edwards and Thames, 2007; Hallerberg and Marier, 2004; Crisp et al., 2004, Garland and Biglaiser, 2009; Nielson, 2003; Hicken and Simmons, 2008).

Our results imply that electoral rules and their direct effects on intra-party competition need to be incorporated in the literature that attempts to explain the variation in reform success in the post-communist countries. A number of studies have investigated the outcomes of electoral rules, namely, political fragmentation, and their effect on reform success, but have ignored the direct effects of electoral rules. A number of studies have found that reform success depends on the level of political fragmentation, partially shaped by electoral rules (Andrews and Montinola, 2004; Dethier et al., 1999, Frye and Mansfield, 2003; Horowitz and Browne, 2008; Slantchev, 2005; Stone, 2002). Political fragmentation and unstable and fragmented political competition is often blamed on proportional rules. For example, according to Norris (2004), a move to more majoritarian rules in Ukraine might mitigate some of the negative consequences of "unstable, undisciplined, and fragmented party competition" in Ukraine (p. 254). This study demonstrates that electoral system features that affect the level of intra-party competition need to be considered as an explanatory factor in its own right. Our results imply that while proportional rules might have a negative impact on reform success indirectly, as they increase the number of effective parties, they might have a direct positive impact on reform success if they do not encourage the personal vote through preferential votes, for example. Thus, the direct and indirect effects of electoral rules might affect reform success in different ways and scholars and electoral engineers need to take both into account when they design electoral laws. Our findings also provide evidence that studies of economic reform need to move beyond the sterile proportional-

<sup>&</sup>lt;sup>18</sup> Source: World Bank Database of Political Institutions.

representation/singlemember district divide and focus more concretely on how electoral rules affect the level of intra-party competition.

Our research has empirical implications for electoral engineers in new democracies. The results indicate that changes to electoral systems have broader implications than many reformers may consider. Almost all electoral system changes in the post-communist countries involved a replacement of SMD systems with mixed (Albania, Ukraine) or PR (Macedonia), or a replacement a mixed system to pure PR (Russia, Ukraine, Serbia, Bulgaria, and Croatia), which should be generally conducive to reform progress. To the extent that electoral engineers chose electoral institutions according to normative criteria, reformers have usually defended new rules based on their consequences for accountability and representation. Accountability and representation considerations motivated the choice of the mixed electoral system in Russia in 1993 (Remington and Smith, 1996) or the recent shift from pure PR to a mixed system in Romania. Electoral engineers in Romania justify the change, which is the only shift from a PR system to a more majoritarian one in the postcommunist countries, with the need to create ties between constituencies and their representatives and by the need to sanction politicians who previously managed to retain their places on the party lists (Chiru, 2010, p. 4). Our results imply that the shift to more individualistic rules in Romania might affect negatively the progress of economic reform, despite its positive impact on representation.

#### Appendix A. Supplementary material

Supplementary data associated with this article can be found, in the online version, at doi:10.1016/j.electstud.2012. 04.001.

#### References

- Abdelal, R., 2001. National Purpose in the World Economy: Post-Soviet States in Comparative Perspective. Cornell University Press, Ithaca, N.Y.
- Alesina, A., Drazen, A., 1991. Why are stabilizations delayed? American Economic Review 81 (5), 1170–1188.
- Ames, B., 1995a. Electoral rules, constituency pressures, and pork barrel: bases of voting in the Brazilian Congress. Journal of Politics 57 (2), 324–343.
- Ames, B., 1995b. Electoral strategy under open-list proportional representation. American Journal of Political Science 39 (2), 406–433.
- Ames, B., 2001. The Deadlock of Democracy in Brazil. University of Michigan Press, Ann Arbor.
- Andrews, J., Montinola, G., 2004. Veto players and the rule of law in emerging democracies. Comparative Political Studies 37, 55–87.
- Arellano, M., Bond, S., 1991. Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. Review of Economic Studies 58 (2), 277–297.
- Armingeon, K., Careja, R., 2004. Comparative Political Data Set for 28 Post-Communist Countries, 1989–2004.
- Aslund, A., Boone, P., Johnson, S., 1996. How to stabilize: lessons from post-communist countries. Brookings Papers on Economic Activity 1, 217–311.
- Bawn, K., Thies, M., 2003. A comparative theory of electoral incentives: representing the unorganized under PR, plurality and mixed member electoral systems. Journal of Theoretical Politics 15 (1), 5–32.
- Beck, N., Katz, J., 1995. What to do (and not to do) with time-series crosssection data. American Political Science Review 89, 634–647.

- Beck, T., Clarke, G., Groff, A., Keefer, P., Walsh, P., 2001. New tools and new tests in comparative political economy. World Bank Economic Review 15, 165–176.
- Berkowitz, D., Li, W., 1997. Decentralization in Transition Economies: A Tragedy of the Commons. University of Pittsburgh, Unpublished manuscript.
- Bunce, V., 2005. The national idea: imperial legacies and post-communist pathways in Eastern Europe. East European Politics and Societies 19 (3), 406–442.
- Cain, B., Ferejohn, J., Fiorina, M., 1984. The constituency service basis of the personal vote for U.S. Representatives and British members of parliament. American Political Science Review 78 (1), 110–125.
- Cain, B., Ferejohn, J., Fiorina, M., 1987. The Personal Vote, Constituency Service, and Electoral Independence. Harvard University Press, Cambridge, MA.
- Carey, J., Shugart, M.S., 1995. Incentives to cultivate a personal vote. Electoral Studies 14 (4), 417–439.
- Chang, E., 2005. Electoral incentives for political corruption under openlist proportional representation. The Journal of Politics 67 (3), 716– 730.
- Chang, E., Golden, M., 2006. Electoral systems, district magnitude, and corruption. British Journal of Political Science 37, 115–137.
- Chiru, M., 2010. Legislative Recruitment and Electoral System Change: The Case of Romania. MA Dissertation, Central European University.
- Cox, G., McCubbins, M., 1993. Legislative Leviathan. Cambridge University Press, Cambridge, MA.
- Cox, G., McCubbins, M., 2001. The institutional determinants of economic policy outcomes. In: Haggard, S., McCubbins, M. (Eds.), Presidents, Parliaments, and Policy. Cambridge University Press, pp. 21–63.
- Cox, K., Schoppa, L., 2002. Interaction effects and mixed member electoral systems: theory and evidence from Germany, Japan, and Italy. Comparative Political Studies 35 (9), 1027–1053.
- Crisp, B., Escobar-Lemmon, M., Jones, B., Jones, M., Taylor-Robinson, M., 2004. Vote-seeking incentives and legislative representation in six presidential democracies. The Journal of Politics 66 (3).
- de Haan, J., Sturm, J.-E., 1994. Political and institutional determinants of fiscal policy in the European Community. Public Choice 80, 157–172.
- De Melo, M., Denizer, C., Gelb, A., Tenev, S., 1997. Circumstance and Choice: The Role of Initial Conditions and Policies in Transitional Economies. Washington, DC: World Bank. Public Policy Working Paper No. 1866.
- de Melo, M., Denizer, C., Gelb, A., Tenev, S., 2001. Circumstance and choice: the role of initial conditions and policies in transition economies. World Bank Economic Review 15 (1), 1–31.
- Dethier, J.-J., Ghanem, H., Zoli, E., 1999. World Bank Policy Research Paper No. 2194.
- Duverger, M., 1954. Political Parties. Wiley, New York.
- Eaton, K., 2002. Politicians and Economic Reform in New Democracies: Argentina and the Philippines in the 1990s. Pennsylvania State University Press, University Park, PA.
- Eaton, K., Maxfield, S., 1999. Economic Reform and Electoral Incentives: A Research Precis. Unpublished Manuscript, Princeton University.
- EBRD. 2005. Transition Report 2005: Business in Transition, London. European Bank for Reconstruction and Development.
- Edin, P., Ohlsson, H., 1991. Political determinants of budget deficits: coalition effects versus minority effects. European Economic Review 35, 1597–1603.
- Edwards, M., Thames, F., 2007. District magnitude, personal votes, and government expenditures. Electoral Studies 26, 338–345.
- Fenno, R., 1978. Home Style: House Members in Their Districts. Little Brown, Boston.
- Fiorina, M., 1989. Congress: A Keystone of the Washington Establishment. Yale University Press, New Haven.
- Fish, S., 1998. The determinants of economic reform in the postcommunist world. East European Politics and Societies 12 (1), 31–78.
- Franzese Jr., R., 2002. Macroeconomic Policies of Developed Democracies. Cambridge University Press, Cambridge.
- Franzese Jr., R., 2007. Fiscal policy with multiple policymakers: veto actors and deadlock. In: Magara, H. (Ed.), Veto Players and Policy Change. Waseda University Press.
- Frogs, M., Member, M., 2004. Electoral institutions: party discipline in the XIV Italian chamber of deputies. Journal of Legislative Studies 10 (4), 10–31.
- Frye, T., 2010. Building States and Markets After Communism: The Perils of Polarized Democracy. Cambridge, MA: Cambridge University Press.
- Frye, T., Mansfield, E., 2003. Fragmented protection: the political economy of trade policy in the post-communist world. British Journal of Political Science 33, 635–657.

- Gaddy, C.G., Ickes, B.W., 2002. Russia's Virtual Economy. Brookings Institution, Washington, DC.
- Garland, M., Biglaiser, G., 2009. Do electoral rules matter? Political institutions and foreign direct investment in Latin America. Comparative Political Studies 42 (2), 224–251.
- Gaviria, A., Panizza, U., Seddon, J., Stein, E., 2004. Political institutions and growth collapses. Latin American Journal of Economic Development.
- Geddes, B., 1994. Politicians Dilemma: Building State Capacity in Latin America. Univbersity of California Press, Berkeley, CA.
- Gehlbach, S., Malesky, E., 2010. The Contribution of Veto Players to Economic Reform. The Journal of Politics, 72 (4), 957–975.
- Golden, M., 2003. Electoral connections: the effects of the personal vote on political patronage, bureaucracy and legislation in postwar Italy. British Journal of Political Science 33 (2), 189–212.
- Grilli, V., Masciandro, D., Tabellini, G., 1991. Political and monetary institutions and public financial policies in the industrial countries. Economic Policy 6 (13), 342–392.
- Grzymala-Busse, 2002. Redeeming the Communist Past: The Regeneration of Communist Parties in East Central Europe. Cambridge University Press, New York.
- Haggard, S., Kauffman, R., 1995. The Political Economy of Democratic Transitions. Princeton University Press, Princeton, NJ.
- Hallerberg, M., von Hagen, J., 1999. Electoral institutions, cabinet negotiations, and budget deficits in the European Union. In: Poterba, J., von Hagen, J. (Eds.), Fiscal Institutions and Fiscal Performance. The University of Chicago Press.
- Hallerberg, M., Marier, P., 2004. Executive authority, the personal vote, and budget discipline in Latin American and Caribbean countries. American Journal of Political Science 48, 571–587.
- Hallerberg, M., Basinger, S., 1998. Comparative Political Studies 31 (3), 321–352.
- Haspel, M., Remington, T.D., Smith, S., 1998. Electoral institutions and party cohesion in the Russian Duma. Journal of Politics 60, 417–439.
- Hellman, J., 1996. Constitutions and economic reform in the post-communist transitions. Eastern European Constitutional Review 5 (1), 45–56.
- Hellman, J., 1998. Winners take all: the politics of partial reform in postcommunist transition. World Politics 50 (2), 203–234.
- Henisz, W., Mansfield, E., 2006. Votes and vetoes: the political determinants of commercial openness. International Studies Quarterly 50, 189–211.
- Herron, E., Nishikawa, M., 2001. Contamination effects and the number of parties in mixed superposition electoral systems. Electoral Studies 20 (1), 63–86.
- Hewett (Ed.), 1988. Reforming the Soviet Economy: Efficiency and Equity. Brookings Institution, Washington DC.
- Heybey, B., Murrell, P., 1999. The relationship between economic growth and the speed of liberalization during transition. Journal of Policy Reform 3 (2), 121–137.
- Hicken, A., Simmons, J., 2008. The personal vote and the efficacy of education spending. American Journal of Political Science 52 (1), 109–124.
- Hoff, K., Stiglitz, J., 2004. The Transition from Communism. World Bank Research Paper.
- Horowitz, S., 2003. War after communism: effects on political and economic reform in the former Soviet Union and Yugoslavia. Journal of Peace Research 40 (1), 25–48.
- Horowitz, S., Browne, E.C., 2008. Party systems and economic policy change in postcommunist democracies: ideological consensus and institutional competition. Comparative Politics 41 (1), 21–40.
- Ishiyama, J., Velten, M., 1998. Presidential power and democratic development in post-communist politics. Communist and Post-Communist Studies 31 (3), 217–233.
- Jensen, N., 2003. Rational citizens against reform: poverty and economic reform in transition economies. Comparative Political Studies 36 (9), 1092–1111.
- Keefer, P., Stasavage, D., 2003. The limits of delegation: veto players, central bank independence, and the credibility of monetary policy. American Political Science Review 97 (3), 407–423.
- Keele, L, Kelly, N., 2006. Dynamic models for dynamic theories: the ins and outs of lagged dependent variables. Political Analysis 14 (2), 186–205.
- Kitschelt, H., 2000. Linkages between citizens and politicians in democratic polities. Comparative Political Studies 33 (6–7), 845–879.
- Kitschelt, H., 2001. Post-Communist economic Reforms: Causal Mechanisms and Concomitant Properties. Paper presented at the Annual Meeting of the American Political Science Association.
- Kitschelt, H., Mansfedlova, Z., Markowski, R., Toka, G., 1999. Post-Communist Party Systems: Competition, Representation, and Inter-Party Competition. Canbridge University Press, Cambridge.
- Klingemann, H.-D., Wessels, B., 2001. The political consequences of Germany's mixed-member system: personalization at the grass roots? In: Shugart, M.S., Wattenberg, M. (Eds.), Mixed-Member

Electoral Systems: The Best of Both Worlds? Oxford University Press, pp. 279–296.

- Kontopoulos, Y., Perotti, R., 1999. Government fragmentation and fiscal policy outcomes: evidence from OECD countries. In: Poterba, J., von Hagen, J. (Eds.), Fiscal Institutions and Fiscal Performance. The University of Chicago Press.
- Kopstein, J., Reilly, D., 2000. Geographic diffusion and the transformation of the postcommunist world. World Politics 53 (1), 1–37.
- Kornai, J., 1992. The Road to a Free Economy. W.W. Norton, New York.
- Kunicova, J., Rose-Ackerman, S., 2005. Electoral rules and constitutional structure as constraints on corruption. British Journal of Political Science 35, 573–606.
- Kunicova, J., Remington, T., 2008. Mandates, parties, and dissent: effect of electoral rules on parliamentary party cohesion in the Russian Duma, 1994–2003. Party Politics 14, 555–575.
- Kurtz, M., Barnes, A., 2002. The political foundations of post-communist regimes—marketization, agrarian legacies, or international influences. Comparative Political Studies 35 (5), 524–553.
- Lijphart, A., 1994. Electoral Systems and Party Systems: A Study of Twenty-Seven Democracies, 1945–1990. Oxford University Press, Oxford.
- Lizzeri, A., Persico, N., 2001. The provision of public goods under alternative electoral incentives. American Economic Review 91 (1), 225–239.
- Mansfield, E., Milner, H., Pevehouse, J., 2007. Vetoing co-operation: the impact of veto players on preferential trading arrangements. British Journal of Political Science 37 (3), 403–432.
- Marshall, M., Jaggers, K., 2006. Polity IV Project: Political Regime Characteristics and Transitions, 1800–1999. University of Maryland.
- Massicotte, L., Blais, A., 1999. Mixed electoral systems: a conceptual and empirical survey. Electoral Studies 18, 341–366.
- Mattli, W., Plumper, T., 2002. The demand-side politics of EU enlargement: democracy and the application for EU membership. Journal of European Public Policy 9 (4), 550–574.
- Mayhew, D., 1974. Congress: The Electoral Connection. Yale University Press, New Haven.
- McCubbins, M.D., Rosenbluth, F., 1995. Party provision for personal politics: dividing the vote in Japan. In: Cowhey, P., McCubbins, M.D. (Eds.), Structure and Policy in Japan and the United States. Cambridge University Press, pp. 35–55.
- Merlevede, B., 2003. Reform reversals and output growth in transition economies. Economics of Transition 11 (4), 597–751.
- Milesi-Ferreti, G.M., Perotti, R., Rostagno, M., 2002. Electoral systems and public spending. Quarterly Journal of Economics 117, 609–657.
- Milesi-Ferretti, Perotti, R., Rostagno, M., 2000. Electoral Systems and the Composition of Public Spending, Mimeo, Columbia University.
- Mizusaki, T., Mori, H., 1998. Tokuhyo Data Kara Mita Heiritsusei No Mekanizumu. Senkyo Kenkyu.
- Moser, R., Scheiner, E., 2004. Mixed electoral systems and electoral system effects: controlled comparison and cross-national analysis. Electoral Studies 23 (4), 575–599.
- Neto, A., Cox, G., 1997. Electoral institutions, cleavage structures, and the number of parties. American Journal of Political Science 41, 149–174.
- Nielson, D., 2003. Supplying trade reform: political institutions and liberalization in middle-income presidential democracies. American Journal of Political Science 47, 470–491.
- Norris, P., 2004. Electoral Engineering: Voting Rules and Political Behavior. Cambridge University Press.
- Ordeshook, P., Shvetsova, O., 1994. Ethnic heterogeneity, district magnitude, and the number of parties. American Journal of Political Science 38, 100–123.
- Parker, G., 1986. Homeward Bound: Explaining Changes in Congressional Behavior. University of Pittsburgh Press, Pittsburgh.
- Persson, T., Tabellini, G., 1999. The size and scope of government: comparative politics with rational politicians, 1998 Alfred Marshall Lecture. European Economic Review 43, 699–735.
- Persson, T., Tabellini, G., 2003. The Economic Effects of Constitutions. The MIT Press, Boston.
- Persson, T., Tabellini, G., 2000. Political Institutions and Policy Outcomes: What Are the Stylized Facts?. Bocconi University in its series Working Papers with number 189.
- Persson, T., Tabellini, G., Trebbi, F., 2001. Electoral Rules and Corruption. NBER Working Paper No. 8154.
- Powell, G.B., 1982. Contemporary Democracies: Participation, Stability, and Violence. Harvard University Press, Cambridge.
- Przeworski, A., 1991a. Democracy and the Market: Political and Economic Reforms in Eastern Europe and Latin America. Cambridge University Press, New York.
- Przeworski, A., 1991b. Democracy and the Market: Political and Economic Reforms in Eastern Europe and Latin America. Cambridge University Press, Cambridge, MA.

Qian, Y., Roland, G., 1998. Federalism and the soft budget constraint. American Economic Review 88 (5), 1143–1162.

- Ramseyer, M., Rosenbluth, F., 1993. Japan's Political Marketplace. Harvard University Press, Cambridge.
- Remington, T., Smith, S., 1996. Political goals, institutional context, and the choice of an electoral system: the Russian parliamentary election law. American Journal of Political Science 40 (4), 1280–1299.
- Riker, W., 1982. The two-party system and Duverger's law: an essay on the history of political science. American Political Science Review 76, 753–766.
- Roeder, P., 1999. Peoples and states after 1989: the political costs of incomplete national revolutions. Slavic Review 58 (4), 854-882.
- Roland, G., 2000. Transition and Economics: Politics, Markets, and Firms. MIT Press, Cambridge.
- Roodman, D., 2006. How to do xtabond2: An Introduction to Difference and System GMM in STATA. Center for Global Development Working Paper 103.
- Samuels, D., 1999. Incentives to cultivate a party vote in candidate-centric electoral systems: evidence from Brazil. Comparative Political Studies 32 (4), 487–518.
- Shugart, M., Carey, J., 1992. Presidents and Assemblies: Constitutional Design and Electoral Dynamics. Cambridge University Press, Cambridge.
- Shugart, M.S., Meoldy, V., Kati, S., 2005. Looking for locals: voter information demands and personal-vote-earning attributes of legislators under PR. American Journal of Political Science 49, 437–449.
- Siaroff, A., 2003. Comparative presidencies: the inadequacy of the presidential, semi-presidential and parliamentary distinction. European Journal of Political Research 42 (3), 287–312.
- Slantchev, B., 2005. The political economy of simultaneous transitions: an empirical test of two models. Political Research Quarterly 58 (2), 279– 294.
- Smith, S., Remington, T., 2001. The Politics of Institutional Choice: Formation of the Russian State Duma. Princeton University Press, Princeton, NJ.
- Stark, D., Bruszt, L., 1998. Post-Socialist Pathways: Transforming Politics and Property in East Central Europe. Cambridge University Press, Cambridge.

- Stein, E., Talvi, E., Grisanti, A., 1999. Institutional arrangements and fiscal performance: the Latin American experience. In: Poterba, J., von Hagen, J. (Eds.), Fiscal Institutions and Fiscal Performance. The University of Chicago Press.
- Stepan, A., Skach, C., 1993. Constitutional frameworks and democratic consolidation: parliamentarism vs. presidentialism. World Politics 46 (1), 1–22.
- Stone, R., 2002. Lending Credibility: The International Monetary Fund and the Post-Communist Transition. Princeton University Press, New Jersey.
- Thames, F., 2001. Legislative voting behavior in the Russian Duma: understanding the effect of mandate. Europe-Asia Studies 53, 869–894.
- Thames, F., 2005. A house divided: party strength and the mandate divide in Hungary, Russia, and Ukraine. Comparative Political Studies 38, 282–303.
- Thames, F., 2007. Electoral Rules and Presidential Support in the Russian Duma, 1996–2003. Unpublished manuscript.
- Thies, M., 1998. When will pork leave the farm? Institutional bias in Japan and the United States. Legislative Studies Quarterly 23, 467–492.
- Treisman, D., 2000. Decentralization and inflation: commitment, collective action or continuity. American Political Science Review 94 (4), 837–857.
- Tsebelis, G., 1995. Decision-making in political systems: veto players in presidentialism, parliamentarism, multicameralism, and multipartyism. British Journal of Political Science 25 (3), 289–325.
- Vachudova, M., 2005. Europe Undivided: Democracy, Leverage, and Integration after Communism. Oxford University Press, Oxford.
- Wallack, J., Gaviria, A., Panizza, U., Stein, E., 2003. Particularism around the world. World Bank Economic Review 17, 133–143.
- Weingast, B., Shepsle, K., Johnsen, C., 1981. The political economy of benefits and costs: a neo-classical approach to distributive politics. Journal of Political Economy 89 (4), 642–664.
- Williamson, J., 1994. The political economy of policy reform. In: Williamson, J. (Ed.), Search of A Manual for Technopols. Institute for International Economics.